

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT: H. Wong et al.
SERIAL NO.: Not yet assigned EXAMINER: Not yet assigned
FILED: HEREWITH GROUP: Not yet assigned
FOR: **MHC COMPLEXES AND USES THEREOF**

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CERTIFICATE OF MAILING

I, Norah C. Sullivan, hereby certify that this correspondence is being deposited with the United States Patent and Trademark Office, as Express Mail Post Office to Addressee, Label No.: EL 895417034US, postage prepaid, on July 6, 2001 in an envelope addressed to: The Assistant Commissioner of Patents, Washington, DC 20231.



Norah C Sullivan

SIR:

PRELIMINARY AMENDMENT

Please amend the above-identified application, being filed herewith, as follows:

IN THE CLAIMS

Please cancel, without prejudice or disclaimer, claims 1-50.

Kindly add the following new claims.

51. (new) A multivalent MHC fusion complex comprising two or more linked MHC fusion complexes,

wherein each MHC fusion complex comprises a MHC class II molecule that contains a peptide-binding groove, a presenting peptide covalently linked to an N-terminus of the MHC

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molecule and effectively positioned in the peptide-binding groove, and a linker sequence interposed between the presenting peptide and the MHC molecule, the fusion complex being capable of increasing or decreasing T cell proliferation or development, wherein the presenting peptide is encoded by nucleic acid sequence encoding a leader sequence attached to the presenting peptide.

52. (new) The multivalent MHC fusion complex of claim 51, wherein the MHC fusion complex does not contain the transmembrane and cytoplasmic domains of the MHC molecule and is linked to an immunoglobulin.

53. (new) The multivalent MHC fusion complex of claim 52, wherein the immunoglobulin is IgG, IgM or Fab₂.

54. (new) The multivalent MHC fusion complex of claim 51, wherein two or more of the MHC fusion complexes are chemically cross-linked together or to a suitable particle.

55. (new) The multivalent MHC fusion complex of claim 54 wherein the MHC fusion complex are genetically modified to include amino acid residue(s) with chemically reactive side chains and the reactive side chains are used to chemically cross-link the MHC fusion complexes.

56. (new) The multivalent MHC fusion complex of claim 55 wherein the C terminus of the β chain of MHC fusion complex is genetically modified to include amino acid residue(s) with chemically reactive side chains.

57. (new) The multivalent MHC fusion complex of claim 55 wherein the amino acid is a Cys or His residue.

58. (new) The multivalent MHC fusion complex of claim 56 wherein the amino acid is a Cys or His residue.

59. (new) The multivalent MHC fusion complex of claim 51 wherein two or more of the MHC fusion complexes are chemically cross-linked to a dendrimer particle.

REMARKS

The paragraph entitled "CROSS-PREFERENCE TO RELATED APPLICATIONS" has been amended in the continuation application transmittal filed herewith.

Solely for the purpose of reducing initial extra claim fees for the application, and without any prejudice or disclaimer, claims 1-50 have been cancelled without prejudice and claims 51-59 have been added. No new matter has been added by virtue of these amendments.

Early consideration and allowance are respectfully requested.

Respectfully submitted,

Date: July 6, 2001



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APPENDIX

IN THE CLAIMS

51. (new) A multivalent MHC fusion complex comprising two or more linked MHC fusion complexes.

wherein each MHC fusion complex comprises a MHC class II molecule that contains a peptide-binding groove, a presenting peptide covalently linked to an N-terminus of the MHC molecule and effectively positioned in the peptide-binding groove, and a linker sequence interposed between the presenting peptide and the MHC molecule, the fusion complex being capable of increasing or decreasing T cell proliferation or development, wherein the presenting peptide is encoded by nucleic acid sequence encoding a leader sequence attached to the presenting peptide.

52. (new) The multivalent MHC fusion complex of claim 51, wherein the MHC fusion complex does not contain the transmembrane and cytoplasmic domains of the MHC molecule and is linked to an immunoglobulin.

53. (new) The multivalent MHC fusion complex of claim 52, wherein the immunoglobulin is IgG, IgM or Fab₂.

54. (new) The multivalent MHC fusion complex of claim 51, wherein two or more of the MHC fusion complexes are chemically cross-linked together or to a suitable particle.

55. (new) The multivalent MHC fusion complex of claim 54 wherein the MHC fusion complex are genetically modified to include amino acid residue(s) with chemically reactive side chains and the reactive side chains are used to chemically cross-link the MHC fusion complexes.

57. (new) The multivalent MHC fusion complex of claim 55 wherein the amino acid is a Cys or His residue.

58. (new) The multivalent MHC fusion complex of claim 56 wherein the amino acid is a Cys or His residue.

59. (new) The multivalent MHC fusion complex of claim 51 wherein two or more of the MHC fusion complexes are chemically cross-linked to a dendrimer particle.

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